

Penalty Calculation and Rationale for Ritewood Egg

Summary of Violations from the NOVI05-03

1. UCA 19-5-107(1)(a) for discharging pollutants to waters of the state for a period of 4 days, as specified in Findings of Fact paragraphs C.6 through C.12.
2. UCA 19-5-107(3) for having made a discharge not authorized under an existing valid discharge permit, for a period of 4 days or more, as specified in Findings of Fact paragraphs C.6 through C.12.
3. R317-2-7.2 Water Quality Standards – Narrative Standard – for discharging pollutants with constituents as specified in Findings of Fact paragraphs C.6 through C.12.
4. CAFO Permit Part III.B.1. through 6. and CAFO Permit Part IV.A. Table 1, Line 6 for failure to have a CNMP, as specified in Findings of Fact paragraphs C.13 through C.15.
5. CAFO Permit Part I.E. (Release of CAFO Generated Manure) for failing to obtain signed releases and certifications for application rates from recipients of the manure (compost) as specified in Findings of Fact paragraphs C.16 through C.17.

Penalty Calculation

PENALTY CALCULATION FOR RITEWOOD EGG

Gravity Component Penalty
Calculation:

Category B Violations: #1, #2, and #3

Violations #1 and #2 are being combined for penalty calculations.

Number of Category B Violations =>					2
Total Days of Category B Violations =>				*	4
Cat. B Violations Multiplier =>				=	8
Daily Penalty Range	Min \$2,000	Max \$7,000	% Adjustments	=	\$7,000
Credits:		History of	25	-	\$417
1/3		Compliance		-	\$0
1/3		Degree of	0	-	\$0
1/3		Negligence		-	\$833
1/3		Degree of	50	-	\$833
1/3		Cooperation		=	\$5,750
Cat B Violation Penalty =>				=	\$5,750
Cat B Violation Penalty =>				=	\$5,750
Cat. B Violations Multiplier =>				*	8
Total Category B Penalty =>				=	\$46,000

Category D Violations:

Category D Violations # 4

Number of Category D Violations for Violation # 4 =>				=	1
Total Days In Violation For Violation # 4 =>				=	364
Daily Penalty Range	Min \$0	Max \$500	% Adjustments	=	\$500
Credits:		History of	25	-	\$42
1/3		Compliance	0	-	\$0
1/3		Degree of			
		Negligence	50	-	\$83
1/3		Degree of			
		Cooperation			
				=	<u>\$375</u>
Daily Penalty amount after adjustment to bring it in line with previous penalties, and the severity of the violation. =>					\$200
Total Violation # 4 Daily Penalty =>					\$200
Total Days In Violation For Violation # 4 =>				*	<u>364</u>
Total Penalty Violation # 4=>				=	\$72,800

Category D Violations # 5

Number of Category D Violations for Violation # 5 =>				=	1
Total Days In Violation For Violation # 5 =>				=	11
Daily	Min	Max			
Penalty Range	\$0	\$500	%	=	\$500
			Adjustments		
Credits:		History of	25	-	\$42
1/3		Compliance			
		Degree of	0	-	\$0
1/3		Negligence			
		Degree of	50	-	\$83
1/3		Cooperation			
				=	\$375
Daily Penalty amount after adjustment to bring it in line with previous penalties, and the severity of the violation. =>					\$200
Total Violation # 5 Daily Penalty =>					\$200
Total Days In Violation For Violation # 5 =>				*	11
Total Penalty Violation # 5 =>				=	\$2,200
Total Penalty Violation #1, #2, and #3				+	\$46,000
Total Penalty Violation # 4				+	\$72,800
Total Penalty Violation # 5				+	\$2,200
TOTAL GRAVITY COMPONENT PENALTY				=	\$121,000

Economic Benefit Component

	Construction Cost	\$55,581
	Delayed Cost	+ \$8,558
	Avoided Cost	= <u>\$64,139</u>
Potential Adjustment for Improvements = Construction Cost		
Adjustment for Improvements =		\$55,581
Total Economic Benefit Penalty		= <u>\$64,139</u>
Total Penalty		= <u>\$185,139</u>
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Adjustment for Improvements	-	\$55,581
Adjustment to Avoid Litigation	-	\$24,558
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Adjusted Penalty After Improvements (-\$55,581)		= <u>\$105,000</u>
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Gravity Component

There were no documented public health effects from any of the violations, so the violations are not considered to be Category A according to R317-1-8.3¹.

Violations #1 and #2 pertain to an illegal discharge containing significant quantities of pollutants discharged from a containment pond to a site where it contaminated several acres of snow and snow melt that entered the Cub River. The pollutants, the amount that left the pond, and the amount of snow that was contaminated by contact and saturation by the effluent, warrant a Category B violation according to R317-1-8.3².

Violation #3 pertains to an illegal discharge that contained pollutant levels in excess of water quality standards for the Cub River. This warrants a Category B violation according to R317-1-8.3. Specifically limitations on Biochemical Oxygen Demand (BOD), Dissolved Oxygen (DO), bacteria and ammonia levels were exceeded.

Violation #4 is for failing to develop a CNMP by July 2004, as required under the CAFO permit. This warrants a Category D violation according to R317-1-8.3³.

Violation #5 is for failing to acquire a signed release form from anyone who received the compost indicating the recipients would apply the compost only at agronomic rates, a requirement of the CAFO permit. This warrants a Category D violation according to R317-1-8.3.

Daily Penalty Amount and Adjustments

The daily penalty is the amount used for calculating the final penalty on a per-day basis. It is determined by taking the maximum penalty allowed for the category of the violation, then subtracting the adjustments and multiplying the difference by the number of days being applied to the particular violation.

The adjustments are determined by taking the total penalty range for the category of penalty and dividing by three. Each one-third is then individually adjusted using a percentage applied to three categories. The adjustments are made based on "History of Compliance," "Degree of Negligence," and "Good Faith Efforts to Comply." The adjustments for each area of consideration are then totaled to determine the final penalty adjustment.

The percentage amount of the adjustments is based upon the positive, negative, or nonexistence of historical and present cooperation, compliance, and negligence of the violator (Ritewood).

History of Compliance

Copies of any design work and blue prints for the compost site construction were requested from Ritewood on several occasions (site visits on March 11th and 22nd, 2005 and in the NOV). No documentation was produced.

Ritewood has taken longer than the CAFO permit allowed to develop or acquire a CNMP. The permit indicates that from the time a permit is received, three years is allowed to develop a CNMP. Therefore, the deadline to develop a CNMP was July 3, 2004. Ritewood indicates that the CNMP was started in January of 2005 and was not completed until July 8, 2005, approximately one year late.

Ritewood has records concerning the nutrient content of its compost but has no documentation showing any receiver of the compost signed a release form as required by the permit. Offsite operations (operation at the composting site) started some time around July of 2002. Based on seasonal application of the compost, it is estimated that as many as 180 days of compost distribution may have occurred.

Degree of Negligence

Copies of any design work and blue prints for the compost site construction were requested from Ritewood on several occasions (site visits on March 11th and 22nd, 2005 and in the NOV). No documentation was produced. There was no evidence that the system had been designed and built properly. This includes the size of the impoundment, the soils used for fill, and the compaction that should have occurred during the construction to prevent failure of the dike.

The ditch and pipe that conveyed compost effluent to the Cub River are located on site in the lower area and were covered by snow when the failures began. These features were not covered by snow during other seasons prior to the incident and should have been evident. No physical survey of the area appears to have been done to evaluate these type of features. No one either noticed, or questioned the presence of the pipe, or what effect it might have. The pipe was in close proximity to the pumps used to draw water from the river for irrigation.

It appears that no one made any attempts to survey where the discharged water would flow, either as seepage through the sidewalls of the pond or as discharge through the trench that was constructed to reduce the water level of the impoundment to prevent dike failure.

Ritewood could have started work on development of the CNMP any time after, or even before it received notice of coverage under the CAFO permit. CNMPs usually take 6 to 12 months to develop. Ritewood made very little effort to develop its CNMP prior to the deadline established in the UPDES permit. The

cost of CNMP development to the facility is usually minimal unless a consultant is used. Staff believes that having the CNMP might have uncovered many factors that led to the violation. Its development may have diminished the severity of the violation and altered the company's response to the incident. The CNMP may have brought to light the presence of the "drainage return pipe" from the field to the Cub River.

The compost release forms would have required very little effort. The forms could have been drawn up as part of the receipt for the purchase of the compost.

Good Faith Efforts to Comply

Ritewood has been very cooperative during the investigation and has been willing to work with DWQ on settling this case. Ritewood has made plans for improvements to the facility and is working to correct problems.

Explanation of Calculation and Adjustments

Violations #1 and #2 are being combined for the purpose of calculating the penalty because they are similar with some degree of overlap between them.

According to DWQ penalty policy, a penalty is calculated on a per-calendar-day basis, regardless of the length of time the violation actually occurred on any given day. As a result, the initial penalty calculations for Violations #4 and #5 were considerably higher than previous penalties for similar activities. These daily amounts were adjusted down to bring the amounts in line with previous enforcement actions and penalties assessed at other facilities.

For Violation #4, the CNMP was due July 9, 2004 and was actually completed on July 8, 2005 (364 days late). As a result, the penalty for Violation #4 was extremely high. To bring the violation in line with previous enforcement actions and penalties assessed at other facilities, the violation was downgraded from a Category C to Category D. The daily penalty amount for this violation was further reduced to bring it in line with previous penalties and enforcement actions taken at other facilities.

For Violation #5, the releases were required any time Ritewood released compost to an entity. No release forms were ever received. DWQ is estimating 20 days as the number of times Ritewood may have released the compost without obtaining a release form. The daily penalty has been reduced to bring it in line with previous enforcement actions, and more reflective of the actual nature of the violation.

Economic Benefit Component

A CNMP was required by UPDES CAFO permit No. UTG080016. The CNMP required an impoundment to contain runoff from the composting area for a 25-year, 24-hour storm event. Ritewood chose to build an embankment on the down hill side of a slope to form the impoundment. Although there may be several methods and designs to build an embankment to form an impoundment, Ritewood constructed a homogeneous dam or embankment. Ritewood did not address the failure concerns of a homogeneous dam.

Dam Safety is the section in the Department of Natural Resources (DNR) that regulates and develops standards for dams and embankments in Utah. DNR's philosophy is that there should be redundancies in the systems for constructed impoundments. Accordingly, if one system fails there will be other

provisions to help prevent ultimate failure. A permit is required from DNR for impoundments under 20 acre feet such as Ritewood's impoundment. Ritewood did not obtain the required permit.

Ritewood gained an economic benefit by cutting costs for the construction of the embankment by not incorporating more than a minimum system to create the impoundment. Also, compaction of filler materials is a critical factor in the creation of a homogeneous dam. Ritewood used a compaction method that was an unproven and unorthodox method, not confirmed by compaction tests. Neglecting to supply redundancies in construction of the embankment and neglecting to ensure thorough compaction of the clay in the embankment led to the failure of the embankment causing negative environmental impacts to the Cub River.

The Economic Benefit Penalty calculations were based on Ritewood avoiding and delaying the cost of proper construction of the embankment. Ritewood gained an economic benefit by not building a dam according to appropriate standards.

If Ritewood constructs a new containment system, in accordance with approved engineering plans and practices, the cost of the new construction may be deducted from the avoided costs. However, Ritewood must pay a minimum penalty equaling the delayed costs.

The delayed cost represents the interest earnings that Ritewood gained as a result of failing to construct the original embankment properly calculated from the time of construction to present.

The BEN component of the penalty is composed of delayed cost and avoided cost. The difference between avoided and delayed costs is how much Ritewood could receive as a credit towards the BEN portion of the penalty. This amount is \$55,581.

The recommendation for economic benefit in this case is to apply the full amount of the avoided cost. If Ritewood can show it expended up to \$55,581 in the construction of a new facility, the economic benefit penalty would be reduced to \$8,558.

Avoided cost: \$55,581 (avoided cost for construction) + \$8,558 (delayed cost for construction) = \$64,139

¹ According to R317-1-8.3, Category A - \$7,000 to \$10,000 per day. Violations with high impact on public health and the environment to include: 1. Discharges which result in documented public health effects and/or significant environmental damage. 2. Any type of violation not mentioned above severe enough to warrant a penalty assessment under category A.

² According to R317-1-8.3, Category B - \$2,000 to \$7,000 per day. Major violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include: 1. Discharges which likely caused or potentially would cause (undocumented) public health effects or significant environmental damage. 2. Creation of a serious hazard to public health or the environment. 3. Illegal discharges containing significant quantities or concentrations of toxic or hazardous materials. 4. Any type of violation not mentioned previously which warrants a penalty assessment under Category B.

³ According to R317-1-8.3, Category D - up to \$500 per day. Minor violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include: 1. Minor excursion of permit effluent limits. 2. Minor violations of compliance schedule requirements. 3. Minor violations of reporting requirements. 4. Illegal discharges not covered in Categories A, B and C. 5. Any type of violations not mentioned previously which warrants a penalty assessment under category D.